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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/555,618	01/05/2001	Volker Zimmer	RDID004IUS	8239

7590

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Jill L Woodburn
The Law Office of Jill L Woodburn
6633 Old Stonehouse Dr
Newburgh, IN 47630

EXAMINER

IP, SIKYIN

ART UNIT

PAPER NUMBER

1742

DATE MAILED: 07/08/2002

Handwritten signature/initials

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

Applicant(s)

Examiner

Group Art Unit

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 4/18/02
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 3-14, 16-26 is/are pending in the application.
Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 3-14, 16-26 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____
 - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 6
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

DETAILED ACTION

Specification

1. The Abstract of the Disclosure is objected to because the abstract is too short and does not represent the invention in details. Correction is required. See 37 CFR § 1.72 and M.P.E.P. § 608.01(b). A substitute abstract should be filed in response to this action. A comprehensive abstract describing the invention has become very significant, as the abstract is often searched and retrieved through commercial data-searching by the scientific and research community in industry, academic institutions and the patent office.
2. Applicant is reminded of the proper language and format of an Abstract of the Disclosure.
3. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 250 words. It is important that the abstract not exceed 250 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said", should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.
4. The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," *etc.*

Claim Rejections - 35 USC § 101

5. Claims 3-14 and 16-26 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 3-14 and 16-26 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

8. The instant claims recite "Use of a surface coating to increase the surface tension of objects." But, the instant specification does not disclose oxide versus surface tension data. Thus, ordinary skill artisan is unable to make or use the invention because the oxide of each cited element versus surface tension data has not

been disclosed.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 3-14 and 16-26 provide for the use of a surface coating to increase the surface tension of objects, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

11. Claims 3-14 and 16-26 are further rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

12. Claims 3 and 4 are indefinite because the meaning of “action of boiling water or water vapour” or “action of superheated water vapour” is unclear.

13. The Markush format in claims 5, 6, 8, 9, 10, 11, 16, 17, and 18 is improper. The proper Markush format is “at least one element selected from the group consisting of A, B, and C.”

Claim Rejections - 35 USC § 103

14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

15. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

16. Claims 3-14 and 16-26 are rejected under 35 U.S.C. § 103 as being unpatentable over USP 4759805 to Saruwatari et al (PTO-1449, col. 1, lines 43-51), FR 2100817 (PTO-1449, page 4, lines 21-30), USP 3730783 to Streel (PTO-1449, col. 2, lines 31-50), USP 3255035 to Clough (PTO-1449, col. 3, example 1), or AN 115:237352 in view of McGannon (The Making, Shaping and Treating of Steel, United States Steel).

17. The Saruwatari et al, FR 2100817, Streel, Clough, and AN 115:237352 reference(s) disclose(s) the features including the claimed steps of forming a metal layer then oxidize the layer with water/vapor/steam. The difference between the Saruwatari et al, FR 2100817, Streel, Clough, and AN 115:237352 reference(s) and

the claims are as follows: said references do not set forth to increase the surface tension of an object by the oxide coating. However, McGannon in Figures 12-109 to 12-114 disclose(s) the surface tensions Vs. oxides in the same field of endeavor.

Therefore, as is evinced by Figures and teachings of McGannon that ordinary skill artisan would recognize oxides formed by cited references would affect surface tensions of the objects. Thus, the use of oxide to change surface tension of an object is contemplated within ambit of ordinary skill artisan as is evinced by references of record.

18. The claimed oxide layer is disclosed by AN 115:237352 in the abstract. Cited references appear silence about the deposited layer thickness. But, the instant specification does not have teaching to select the thickness (see page 13, first full paragraph of the instant specification). Thus, it is considered as non-critical or conventional.

Conclusion

The above rejection relies on the reference(s) for all the teachings expressed in the text(s) of the references and/or one of ordinary skill in the metallurgical art would have reasonably understood or implied from the text(s) of the reference(s). To emphasize certain aspect(s) of the prior art, only specific portion(s) of the text(s) have been pointed out. Each reference as a whole should be reviewed in responding to the rejection, since other sections of the same reference and/or various combination of the cited references may be relied on in future rejection(s) in view of amendment(s).

All recited limitations in the instant claims have been met by the rejections as

Serial No: 09/555,618
Art Unit: 1742

-7-

set forth above.

Applicant is reminded that when amendment and/or revision is required, applicant should therefore specifically point out the support for any amendments made to the disclosure. See MPEP § 2163.06 (a) and 37 C.F.R. § 1.119.


Examiner Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Ip whose telephone number is (703) 308-2542. The examiner can normally be reached on Monday to Friday from 5:30 A.M. to 2:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Roy V. King, can be reached on (703)-308-1146.

The facsimile phone number for this Art Unit 1742 are (703) 305-3601 (Official Paper only) and (703) 305-7719 (Unofficial Paper only). When filing a FAX in Technology Center 1700, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communication with the PTO that are not for entry into the file of the application. This will expedite processing of your papers.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0651.



SIKYIN IP
PRIMARY EXAMINER
ART UNIT 1742

S. Ip
June 27, 2002